

REMARKS

Claim rejections

Claims 20-22, 24-30 and 39-41 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,950,485 to Akhtar et al. (hereinafter "Akhtar"). Claims 1-19, 23, 31-38 and 42-50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,562,110 to Ottenbrite et al. (hereinafter "Ottenbrite") in view of Akhtar.

Akhtar discloses a HAIR RELAXER CREAM. The hair relaxing or hair straightening composition disclosed includes calcium hydroxide in an emulsion and guanidine carbonate in an aqueous activator solution. Before application of the hair relaxer cream to hair, the emulsion and aqueous activator solution are mixed together. The amount of calcium hydroxide in the emulsion is generally between about .01 and 10 weight percent, and preferably between about 4 and 7 weight percent. (See col. 7, lines 1-5). The activator includes an aqueous solution of about 25 to about 30 weight percent guanidine carbonate. (See col. 12, lines 31-33). The combination has shown improved hair straightening where the aqueous activator solution comprises guanidine carbonate at about 28 to about 30 weight percent, preferably about 29 weight percent, prior to admixture. (See col. 12, lines 38-44). The scalp can become aggravated by the alkaline material in the relaxer. (See col. 12, lines 57-60). The hair relaxing process using this composition takes about eight minutes for treatment of all of the models' hair. (See col. 12, line 69 through col. 13, line 2). After the hair relaxing composition has been on the model's head for about 13 to 18 minutes, the relaxer is thoroughly and rapidly removed from the hair by rinsing with water and shampooing. (See col. 13, lines 13-18). Shampoo used following the rinsing step is preferably buffered on the acid side of neutral to about pH 4 to 6 so that residual hair relaxing composition left in the hair or on the scalp is neutralized. (See col. 13, lines 17-22).

Ottenbrite discloses a HAIR STRAIGHTENING AND PERMANENT WAVING COMPOSITION. The hair straightening composition disclosed in Ottenbrite includes about 10 to about 25 weight percent sodium bisulfate, 10 to 25 weight percent urea, and 0.1 to 10 weight percent morpholine. The composition is placed on the hair which is then heated at between 35° and 55°C for about 10 to 30 minutes. The sodium bisulfate-urea-morpholine combination is then rinsed from the hair.

Applicant respectfully submits that Akhtar does not disclose a composition for use in straightening hair that includes "a first ingredient which includes calcium hydroxide having a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight

of the first ingredient” and “a second ingredient which includes guanidine carbonate having a concentration of about 5.68% by weight to about 17.06% by weight, based on the total weight of the second ingredient” as required by amended claim 20 and claim 26. The concentration of the calcium hydroxide in Akhtar is “generally between about 0.1 to about 10 weight percent, and preferably, between about 4 to 7 weight percent.” (See col. 7, lines 3-5). The concentration of the guanidine carbonate activator solution is about 25 to about 30 weight percent guanidine carbonate, and preferably about 29 weight percent. (See col. 12, lines 31-32 and 44). The concentrations of calcium hydroxide used in the hair relaxing compositions used in Examples 1-7 in Akhtar only range from 4% by weight to 6.3% by weight, a significantly narrower range than the “0.1 to about 10” weight percent disclosed in col. 7, line 4. The range of 0.1% to 10% calcium hydroxide is not taught by Examples 1-7 which only disclose tests for ranges of calcium hydroxide between 4% and 6.3% by weight. The ranges of the calcium hydroxide concentration, about 1.21% by weight to about 3.45% by weight, and the guanidine carbonate concentration, about 5.68% by weight to about 17.06% by weight, required by amended claim 20 and claim 26 are not taught by Akhtar. Thus, amended claim 20 and claim 26 are thought to be in condition for allowance. Claims 21, 22, 24, and 25 depend either directly or indirectly from properly allowable amended claim 20 and should also be allowed. Claims 27-30 depend either directly or indirectly from properly allowable amended claim 26 and should also be allowed.

Applicant respectfully submits that Akhtar does not disclose a composition for use in straightening hair including “an alkaline earth metal hydroxide having a concentration of about 0.25% by weight to about 5% by weight, based on the total weight of the composition, the composition configured to straighten hair when heated” as required by amended claim 39. Akhtar does not disclose heating a hair relaxing or hair straightening composition to straighten hair. As stated in the Applicant’s declaration attached as Exhibit A, the composition disclosed in Akhtar is not configured to be heated. Thus, amended claim 39 is thought to be in condition for allowance. Claims 40 and 41 depend either directly or indirectly from properly allowable amended claim 39 and are also thought to be in condition for allowance.

Referring now to the 35 U.S.C. § 103 rejections, Akhtar and Ottenbrite either alone or in combination, do not disclose or teach a method of straightening hair including the steps of “applying a composition to hair, the composition including an alkaline earth metal hydroxide and guanidine carbonate included in an aqueous solution ... the guanidine carbonate having a

concentration of about 5.68% to about 17.06% by weight based on the total weight of the aqueous solution; heating the composition and hair; and removing the composition from hair” as required by amended claim 1. The hair relaxing composition disclosed in Akhtar includes, preferably, 4% to 7% by weight calcium hydroxide and, preferably, 29% by weight guanidine carbonate. The combination of Akhtar and Ottenbrite is improper because the composition claimed in amended claim 1 is not taught by either reference. Thus, removal of the rejection to amended claim 1 is respectfully requested. Claims 2-19 depend either directly or indirectly from properly allowable claim 1 and may contain independently patentable subject matter and should also be allowed.

Regarding claim 31, Applicant respectfully submits that the combination of Akhtar and Ottenbrite is improper. Akhtar does not disclose a hair straightening composition including “calcium hydroxide having a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight of the first ingredient” and “guanidine carbonate having a concentration of about 5.68% by weight to about 17.06% by weight, based on the total weight of the second ingredient” and required by amended by claim 31. Therefore, the combination of Akhtar and Ottenbrite is improper. Thus, Applicant submits that amended claim 31 is in condition for allowance. Removal of the rejection is respectfully requested. Claims 32-38 depend either directly or indirectly from amended claim 31 and may contain independently patentable subject matter. Removal of the rejection to claims 32-38 is respectfully requested.

The applied references, either alone or in combination, do not disclose or teach a method of straightening hair including the steps of “providing a composition including an alkaline earth metal hydroxide ... applying the composition to hair; heating the composition and hair” as required by claim 42. As discussed in Akhtar, the hair relaxing composition is designed to take about 8 minutes to apply to a model’s hair and must be rapidly rinsed from the hair 13-18 minutes after initial contact with the hair. (See col. 13, lines 1-15). The model’s hair is then shampooed with a shampoo buffered to a pH between 4 and 6 so that any remaining hair relaxer composition on the scalp or hair will be neutralized. As discussed in the Applicant’s declaration, applying heat to the composition disclosed in Akhtar after it has been placed on the model’s hair would speed up the chemical reaction occurring in the composition and produce a very high pH very quickly which could irritate the model’s scalp and damage the hair. Combining the heating method of Ottenbrite with the composition disclosed in Akhtar would make the composition inoperable.

In addition, Akhtar actually teaches away from any method that would increase the speed of the chemical reaction that occurs when the composition is placed on the model's hair. As stated in Akhtar, the composition must be "thoroughly and rapidly removed from the hair" 13 to 18 minutes after contact with the hair. (See col. 13, lines 13-17). Referring to the Applicant's declaration, applying heat would speed up this process and produce high pH levels, which is contrary to the teachings of Akhtar. The combination of Akhtar and Ottenbrite is improper because it creates an inoperable combination and it is contrary to the teachings of Akhtar. Removal of the rejection is respectfully requested. Claims 43-50 depend either directly or indirectly from properly allowable amended claim 42 and are thought to be in condition for allowance.

Regarding claim 23, Applicant submits that the combination of Akhtar and Ottenbrite is improper. Akhtar does not disclose the elements of claim 20, which are discussed above. Claim 23 directly depends from claim 20. In addition, Akhtar teaches away from increasing the speed of the reaction initiated by mixing the guanidine carbonate and the calcium hydroxide. The removal of the rejection of claim 23 is respectfully requested.


Final Remarks

Claims 1-50 are believed to be in condition for allowance. Such allowance is respectfully requested.

If necessary, Applicant requests that this Response be considered a request for an extension of time for a time appropriate for the response to be timely filed. Applicant requests that any required fees needed beyond those submitted with this Response be charged to the account of Bose McKinney & Evans LLP, Deposit Account Number 02-3223.

Respectfully submitted,

BOSE McKINNEY & EVANS LLP



Charles W. Arnett
Reg. No. 51,414

Indianapolis, Indiana
(317) 684-5000

470626_7